Amelia J. Eisch, Ph.D.

Curriculum Vitae, 17 February 2014

Associate Professor

Department of Psychiatry

University of Texas Southwestern Medical Center

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ED	UCA	TION
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Yale University, New Haven, CT 1986-1990

Bachelor of Arts in Psychology with Biology Track, *cum laude*

University of California at Irvine, Irvine, CA 1990-1997

Doctor of Philosophy in Biological Sciences, received June 1997

Department of Psychobiology

Yale University Medical School, New Haven, CT 1997-2000

Department of Psychiatry

Postdoctoral Fellowship, completed August 2000

RESEARCH EXPERIENCE AND EMPLOYMENT

Undergraduate Research, Advisor, Dr. Richard J. Gerrig 1988-1989

Department of Psychology, Yale University

"Memory retrieval during language comprehension"

Undergraduate Research, Advisor, Dr. J. Steve Reznick 1988-1989

Department of Psychology, Yale University

"Shyness in infant twins"

Undergraduate Honors Research Thesis, Advisor, Dr. Mark A. Riddle 1989-1990

Child Study Center, Yale University Medical Center

"Socioeconomic impact on symptomatology in Gilles de la Tourette's syndrome"

Doctoral Thesis, Research, and Teaching Assistant, Advisor, Dr. John F. Marshall 1990-1997

Department of Psychobiology, University of California at Irvine

"Neuronal consequences of repeated administration of methamphetamine"

Postdoctoral Fellow, Advisor, Dr. Eric J. Nestler 8/1997-8/2000

Department of Psychiatry, Yale University Medical School

"Neuroadapations to drugs of abuse and antidepressants"

Assistant Professor, Research Track 9/2000-9/2002

Department of Psychiatry, UT Southwestern Medical Center

"Opiates and adult neurogenesis"

Assistant Professor, Tenure Track 10/2002-08/2009

Department of Psychiatry, UT Southwestern Medical Center

"Adult neurogenesis and psychiatric and neurologic disorders"

Member of Integrative Biology and Neuroscience graduate programs

Associate Professor with Tenure 09/2009-present

Department of Psychiatry, UT Southwestern Medical Center

"Neurogenesis, adult hippocampal plasticity, and psychiatric and neurologic disorders"

Member of Integrative Biology and Neuroscience graduate programs

HONORS, FELLOWSHIPS, AND AWARDS

Graduate *cum laude,* Yale University, New Haven, CT

Honors Conferred for undergraduate research thesis, Yale University, New Haven, CT 1990

	Eisch, Amelia
"Socioeconomic impact on symptomatology in Gilles de la Tourette's syndrome"	
Summer Research Fellowship , National Science Foundation For work performed in the Department of Psychobiology, University of California, Irvine	1990
California Reagents Tuition Fellowship, University of California, Irvine, CA	1990-1991
Steinhaus Award for Excellence in Teaching, University of California, Irvine, CA	1991
California Reagents Fellowship, University of California, Irvine, CA	1993
National Research Service Award, Institutional Predoctoral Fellowship National Institute on Drug Abuse/National Institutes of Health (NIH). University of California, Irv	1993-1995 ine
National Research Service Award, Individual Predoctoral Fellowship NIH/NIDA F31 DA0056- "Processes underlying methamphetamine-induced neurotoxicity", direct costs: \$26,016/year	471995-1997
Travel Fellowship for Meeting of the College on Problems of Drug Dependence National Institute on Drug Abuse/National Institutes of Health, total award: \$1,000. San Juan, F	1996 Puerto Rico
National Research Service Award, Institutional Predoctoral Fellowship Department of Psychiatry, Yale University. National Institute on Drug Abuse/NIH, T32 DA 7290	1997-1999
Young Investigator Award, National Alliance for Research on Schizophrenia and Depression "Brain-derived neurotrophic factor (BDNF) in the ventral midbrain: A role in depression", total a	
Featured Young Investigator , National Alliance for Research on Schizophrenia and Depressi Presented research on "Brain-derived neurotrophic factor and depression" at annual meeting in	
Travel Fellowship for Society for Neuroscience Meeting National Institute on Drug Abuse/National Institutes of Health, total award: \$500. San Diego, C.	2004 A
Co-Chair of inaugural minisymposium at annual meeting of Society for Neuroscience "New Horizons for New Neurons: Adult Neurogenesis and Psychiatry", San Diego, CA	2004
Young Investigator Award, National Alliance for Research on Schizophrenia and Depression "Periadolescent methylphenidate and adult hippocampal neurogenesis", total award: \$60,000	2004-2006
Nominated as Outstanding Teacher of the Year Department of Psychiatry, UT Southwestern Medical Center	2005
Educator of Distinction, Joseph B. Whitehead Foundation, Atlanta, GA	2006
Nominated as Outstanding Teacher of the Year Department of Psychiatry, UT Southwestern Medical Center	2007
Chapter Program Award for UT Southwestern Chapter of Sigma Xi (AJ Eisch , President) Sigma Xi, The Scientific Research Society	2008
Chair of minisymposium selected for annual meeting of Society for Neuroscience "Adult Neurogenesis, Mental Health, and Mental Illness: Hope or Hype?", Washington, D.C.	2008
Nominated for The University of Texas Academy of Health Science Education Honor Society and Action Group to advance the quality of education in Texas Universities	2009
Member of CSR/NIH Standing Study Section, "Neurobiology of Motivated Behavior" (NMB) Four-year term 07/01/09-06/30/13. Meetings February, June, and October of each year.	2009
Kavli Frontiers of Science Fellow, National Academy of Sciences, USA	2010
Chair of session on Neural Stem Cells Kavli Frontiers of Science/National Academy of Sciences annual meeting, Irvine, CA	2010
Program Committee, Society for Neuroscience (3 year term)	2010
Selected as inaugural Seymour Benzer Lecturer , National Academy of Sciences Award established by Nobel Laureate Sydney Brenner to honor a researcher in neuroscience of	2011 or genetics
Nominated by UTSW to apply for ELAM program (Executive Leadership in Academic Medicin	•
Guest Editor, Behavioural Brain Research special issue "Adult neurogenesis and behavior" Feb 14, Volume 227, Issue 2	2012

J.

2012

Finalist, 2012 Award for Excellence in Postdoctoral Mentoring

UT Southwestern Medical Center

Second place nomination for 2013 Minnie Stevens Piper Foundation Professorship 2013

UT Southwestern Medical Center

RESEARCH GRANTS

Ongoing (in chronological order of award date)

NIH National Institute on Drug Abuse (NIDA) R01 DA 016765 07/01/03-01/31/14

Type: R01 Research Project Grant Title: Opiates and adult neurogenesis (no cost extension until 01/31/15)

Role: Principal Investigator. Total direct costs: \$200,000/yr (Years 1-5); \$225,000/yr (Years 6-10)

NIH National Institute on Drug Abuse (**NIDA**) T32 DA 007290-21 07/01/13-06/30/18

Type: Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research T32 Training Grant

Title: Basic Science Training Program in Drug Abuse

Role: Principal Investigator (2008 – present)

Total direct costs: \$462,102/yr, 5 yr support for 6 predoctoral and 5 postdoctoral researchers in addiction

research in T32 faculty member laboratories at UT Southwestern Medical Center

National Aeronautics and Space Administration (NASA) NNX12AB55G 11/10/11-11/09/14

Type: Ground-Based Study in Space Radiation (costed extension until 11/09/15 pending)

Title: Molecular and Cellular Mechanisms of Space Radiation-Induced Changes in Hippocampal-Dependent

Behavior

Role: Principal Investigator Total direct costs: \$1,345,114 over 3 yr (~\$283,000/yr)

NIH National Institute on Drug Abuse (**NIDA**) 2K02 DA 023555 08/01/07-12/31/17

Type: K02 Independent Scientist Award (Renewal)

Title: New horizons in adult neurogenesis

Role: Principal Investigator Total direct costs: \$557,190 (~\$111,438/yr)

Pending (under review, under revision, or in preparation)

NIH National Institute of Mental Health (**NIMH**) (renewal application) 07/01/14-06/30/19

Title: Translational Research Activities in Neuropsychiatry (TRAIN)

Role: Basic Science Liaison, 5% (co-PI, Madhukar Trivedi) Total direct costs: \$250,000/yr

Leiden University Medical Centre (new application) 07/01/14-06/30/16

Type: Contract work for Arn M.J.M van den Maagdenberg, Professor of Molecular and Functional

Neurogenetics Title: Behavioral and neurocellular analysis of calcium channel mutant mice

Role: Principal Investigator Total direct costs: \$150,000/yr

NIH National Institute of Mental Health (NIMH) (new application) 09/01/14-08/31/19

Type: R01 Research Project Grant Title: Neural basis for novel antidepressant treatment

Role: Principal Investigator (co-PI, Dane Chetkovich) Total direct costs: \$250,000/vr

NIH National Institute on Drug Abuse (NIDA) R01 DA 016765 (renewal) 09/01/14-08/31/19

Type: R01 Research Project Grant Title: Opiates and adult neurogenesis

Role: Principal Investigator Total direct costs: \$250,000/yr (Years 11-15)

NIH National Institute of Neurological Disorders and Stroke (**NINDS**) 09/01/14-08/31/19

Type: R01 Research Project Grant R01 NS084278-01 (revision pending)

Title: Activity-dependent transcriptional mechanisms in adult neurogenesis

Role: co-Principal Investigator (PI, Jenny Hsieh) Total direct costs: \$250,000/yr (40% to Eisch)

National Aeronautics and Space Administration (NASA) NNX12AB55G 11/10/14-11/09/15

Type: Ground-Based Study in Space Radiation (costed extension currently under consideration)

Title: Molecular and Cellular Mechanisms of Space Radiation-Induced Changes in Hippocampal-Dependent

Behavior

Role: Principal Investigator Total direct costs: \$182,400/yr

Completed

NIH National Institute of Mental Health (NIMH) P50 MH66172

2002-2007

Type: Silvio O. Conte Center Grant, Eric J. Nestler, Principal Investigator Title: Neural substrates of appetitive behavior in mood and motivation

Role: Project Co-Leader. Total direct costs to Eisch: \$50,000/yr, 5 yr

National Alliance for Research on Schizophrenia and Depression (NARSAD) 2002-2004

Type: Young Investigator Award

Title: Brain-derived neurotrophic factor (BDNF) in the ventral midbrain: A role in depression

Role: Principal Investigator. Total direct costs: \$30,000/yr, 2 yr

NIH National Institute of Aging (NIA)

2003-2004

Type: Pilot Grant from UT Southwestern Medical Center Alzheimer's Disease Center (NIH/NIA P30AG12300)

Title: Adult neurogenesis in a mouse model of Alzheimer's disease

Role: Principal Investigator. Total direct costs: \$30,000/yr, 1 yr

National Alliance for Research on Schizophrenia and Depression (NARSAD) 2004-2006

Type: Young Investigator Award

Title: Periadolescent methylphenidate and adult hippocampal neurogenesis

Role: Principal Investigator. Total direct costs: \$30,000/yr, 2 yr

NIH National Institute on Drug Abuse (**NIDA**) R21 DA 023701 04/01/08-03/31/10 Type: R21 Exploratory Developmental Research Grant (no cost extension through 03/31/11)

Title: Cdk5 and adult hippocampal neurogenesis

Role: Principal Investigator. Total direct costs: \$275,000 over 2 yr

Norwegian Department of Public Health (Nasjonalt Folkehelseinstitutt)

12/1/10-11/30/11

Title: Influence of methadone on adult rat hippocampal neurogenesis

Role: Principal Investigator. Total direct costs: \$50,000/yr

NIH National Institute of Disorders of the Kidney (**NINDK**)

06/01/10-05/31/11

Type: Pilot Grant from UT Southwestern O'Brien Kidney Core Research Center (NIH P30 DK079328)

Title: Stem cells in the adult kidney: application of a novel transgenic mouse

Role: Principal Investigator. Total direct costs: \$42,145/yr (was in no cost extension through 05/30/12)

National Aeronautics and Space Administration (NASA) NNX07AP84G 09/01/07-08/31/11

Type: Ground-Based Study in Space Radiation (was in no cost extension through 8/31/12)

Title: The impact of HZE particles on adult neural stem cells and neurogenesis

Role: Co-Principal Investigator (w/Benjamin P. Chen). Total direct costs to Eisch: \$100,000/year, 4 years
National Alliance for Research on Schizophrenia and Depression (NARSAD) 09/01/10-09/14/12
Type: Independent Investigator Award Title: Adult neurogenesis and stress-induced social avoidance

Role: Principal Investigator. Total direct costs: \$50,000/yr, 2 yr of support

NIH National Institute on Drug Abuse (**NIDA**) R01 DA 016765-07S1 09/29/10-09/28/11

Type: R01 Research Project Grant Supplement (ARRA) Title: Opiates and adult neurogenesis

Role: Principal Investigator. Total direct costs: \$150,000/yr (was in no cost extension through 09/28/12)

PUBLICATIONS

Peer-reviewed Research Papers

- **1) Eisch AJ,** Gaffney M, Weihmuller FB, O'Dell SJ, Marshall JF. Striatal subregions are differentially vulnerable to the neurotoxic effects of methamphetamine. <u>Brain Research.</u> 598:321-326 (1992). PMID 1486494.
- **2) Eisch AJ,** O'Dell SJ, Marshall JF. Striatal and cortical NMDA receptors are altered by a neurotoxic regimen of methamphetamine. <u>Synapse.</u> 22:217-225 (1996). PMID 9132989.
- **3) Eisch AJ,** Schmued LC, Marshall JF. Characterization of cortical Fluoro-Jade labeling after a neurotoxic regimen of methamphetamine. <u>Synapse.</u> 30:329-333 (1997). PMID 9776136.
- **4) Eisch AJ** and Marshall JF. Methamphetamine neurotoxicity: Dissociation of striatal dopamine terminal damage from parietal cortical cell body injury. <u>Synapse.</u> 30:433-445 (1998). PMID 9826235.
- **5) Eisch AJ,** Lammers C-H, Yajima S, Mouradian MM, Nestler EJ. *In vivo* regulation of glial-derived neurotrophic factor-inducible transcription factor (GIF) by kainic acid. <u>Neuroscience</u>. 94:629-636 (1999). PMID 10579223.
- **6)** Messer CJ, **Eisch AJ,** Carlezon WA, Whisler K, Shen L, Wolf DH, Westphal H, Collins F, Russell DS, Nestler EJ. Role for GDNF in biochemical and behavioral adaptations to drugs of abuse. <u>Neuron</u>. 26:1-20 (2000). PMID 10798408.

- **7) Eisch AJ,** Barrot M, Schad CA, Self DW, Nestler EJ. Opiates inhibit neurogenesis in the adult rodent dentate gyrus. <u>Proceedings of the National Academy of Sciences, USA.</u> 97:7579-7584 (2000). PMID 10840056, PMC 16588.
- **8)** Malberg JE, **Eisch AJ,** Nestler EJ, Duman RS. Antidepressant treatment increases the birth and survival of neurons in the adult rat hippocampus. <u>Journal of Neuroscience</u>. 20:9104-9110 (2000). PMID 11124987.
- **9)** Monteggia LM, **Eisch AJ,** Tang MD, Kaczmarek LK, Nestler EJ. Cloning and localization of the hyperpolarization-activated cyclic nucleotide-gated channel family in rat brain. <u>Molecular Brain Research.</u> 81:129-139 (2000). PMID 11000485.
- **10)** Chen ACH, **Eisch AJ**, Sakai N, Takahashi M, Nestler EJ, Duman RS. Regulation of GFRalpha-1 and GFRalpha-2 mRNAs in rat brain by electroconvulsive seizure. <u>Synapse</u>. 39:42-50 (2001). PMID 11071708.
- **11)** Hwang CK, D'Souza UM, **Eisch AJ**, Yajima S, Lammers CH, Yang Y, Lee SH, Kim YM, Nestler EJ, Mouradian MM. Dopamine receptor regulating factor, DRRF: A zinc finger transcription factor. <u>Proceedings</u> of the National Academy of Sciences, USA. 98:7558-7563 (2001). PMID 11390978, PMC 34707.
- **12)** Barrot MB, Olivier JDA, Perrotti LI, DiLeone RJ, Berton O, **Eisch AJ**, Impey S, Storm DR, Neve RL, Yin JC, Zachariou V, Nestler EJ. CREB activity in the nucleus accumbens shell control gating of behavioral responses to emotional stimuli. <u>Proceedings of the National Academy of Sciences, USA.</u> 99:11435-11440 (2002). PMID 12165570, PMC 123274.
- **13)** Georgescu D, Zachariou V, Barrot M, Mieda M, Willie JT, **Eisch AJ**, Yanagisawa M, Nestler EJ, DiLeone RJ. Involvement of the lateral hypothalamic peptide orexin in morphine dependence and withdrawal. <u>Journal of Neuroscience</u>, 23:3106-3111 (2003). PMID 12716916.
- **14)** Bolaños CA, Perrotti LI, Edwards S, **Eisch AJ**, Barrot M, Olson VG, Russell DS, Neve RL, Nestler EJ. Phospholipase Cgamma in distinct regions of the ventral tegmental area differentially modulates mood-related behaviors. Journal of Neuroscience, 20:7569-7576 (2003). PMID 12930795.
- **15) Eisch AJ**, Bolanos CA, Wit J, Simonak RD, Pudiak CM, Barrot M, Verhaagen J, Nestler EJ. BDNF in the ventral midbrain-nucleus accumbens pathway: a role in depression. <u>Biological Psychiatry</u>, 54:994-1005 (2003). PMID 14625141.
- **16)** Mandyam CD, Norris R, **Eisch, AJ**. Chronic morphine induces premature mitosis of proliferating cells in the adult mouse subgranular zone. <u>Journal of Neuroscience Research</u>. 76:783-94 (2004). PMID 15160390.
- **17)** Beech RD, Cleary MA, Treloar HB, **Eisch AJ**, Harrist AV, Zhong W, Greer CA, Duman RS, Picciotto MR. Nestin promoter/enhancer directs transgene expression to precursors of adult generated periglomerular neuron. Journal of Comparative Neurology. 475:128-41 (2004). PMID 15176089.
- **18)** Harrist A, Beech RD, King SL, Zanardi A, Cleary MA, Caldarone BJ, **Eisch AJ**, Zoli M, Picciotto MR. Alteration of hippocampal cell proliferation in mice lacking the beta 2 subunit of the neuronal nicotinic acetylcholine receptor. Synapse. 54:200-6 (2004). PMID 15472930.
- **19)** Waugh JL, Lou AC, **Eisch AJ**, Monteggia LM, Muly EC, Gold SJ. Regional, cellular, and subcellular localization of RGS10 in rodent brain. <u>Journal of Comparative Neurology</u>. 481:299-313 (2005). PMID 15593368.
- **20)** Olson VG, Zabetian CP, Barrot M, **Eisch AJ**, Hughes T, Neve RL, Nestler EJ. Regulation of Drug Reward by CREB: Evidence for Two Functionally Distinct Subregions of the Ventral Tegmental Area. Journal of Neuroscience. 25:5553-62 (2005). PMID 15944383.
- **21)** D'Sa C, **Eisch AJ**, Bolger GB, Duman RS. Differential expression and regulation of the cAMP-selective phosphodiesterase type 4A splice variants in rat brain by chronic antidepressant administration. <u>European Journal of Neuroscience</u>. 22:1463-1475 (2005). PMID 16190900.
- **22)** Donovan MD, Yazdani O, Norris RD, Games RD, German DC, **Eisch AJ**. Decreased adult hippocampal neurogenesis and granule cell number in the PDAPP mouse model of Alzheimer's Disease. <u>Journal of Comparative Neurology</u>. 495:70-83 (2006). PMID 16432899.
- **23)** Lagace DC, Yee JK, Bolanos CA, **Eisch AJ**. Juvenile administration of methylphenidate attenuates adult hippocampal neurogenesis. <u>Biological Psychiatry</u>. 60:1121-1130 (2006). PMID 16893528.
- **24)** Harburg GC, Hall FS, Harrist AV, Sora I, Uhl GR, **Eisch AJ**. Knockout of the mu opioid receptor enhances survival of adult-generated hippocampal granule cell neurons. <u>Neuroscience</u>. 144:77-87 (2006). PMID 17055658, PMC 2230097.

- **25)** Russo SJ, Bolanos CA, Theobald DE, Decarolis N, Kumar A, Renthal NE, Self DW, Russell DS, Neve RL, **Eisch AJ**, Nestler EJ. Insulin receptor substrate-2 in midbrain dopaminergic neurons regulates behavioral and cellular responses to opiates. <u>Nature Neuroscience</u>. 10:93-9 (2007). PMID 17143271. *Comment in Nature Neuroscience*. 10(1):9-10 (2007)
 - Recommended article, Faculty of 1000 Biology
- **26)** Battiste J, Helms AW, Lagace DC, Kim E, Mandyam CD, **Eisch AJ**, Johnson JE. Ascl1 defines sequentially generated lineage restricted neuronal and oligodendrocyte precursor cells in the spinal cord. <u>Development</u>. 134:285-93 (2007). PMID 17166924.
- **27)** Lagace DC, Fischer SJ, **Eisch AJ**. Gender and endogenous levels of estradiol do not influence adult hippocampal neurogenesis in mice. <u>Hippocampus</u>. 17:175-180 (2007). PMID 17286277.
- **28)** Mandyam CD, Harburg GC and **Eisch AJ**. Determination of key technical aspects of precursor detection and division in the adult mouse subgranular zone. <u>Neuroscience</u>. 146:108-122 (2007). PMID 17307295, PMC 2230096.
- **29)** Ongur D, Pohlman J, **Eisch AJ**, Patel TB, Edwin F, Heckers S, Cohen BM, Carlezon Jr., WA. Electroconvulsive seizures stimulate cellular proliferation and reduce expression of Sprouty within the prefrontal cortex of rats. <u>Biological Psychiatry</u>. 62:505-512 (2007). PMID 17336937.
- **30)** Mandyam CD, Wee S. **Eisch AJ**, Richardson HN, Koob GF. Methamphetamine self-administration and voluntary exercise have opposing effects on medial prefrontal cortex gliogenesis. <u>The Journal of Neuroscience</u>. 27(42):11442–11450 (2007). PMID 17942739, PMC 2741502.
- **31)** Krishnan V, Han M-H, Graham D, Berton O, Renthal W, Laplant Q, Graham A, Russo S, Lutter M, Lagace DC, Ghose S, Reister R, Tannous P, Green T, Neve R, Chakravarty S, **Eisch AJ**, Self DW, Lee F, Tamminga C, Cooper D, Gershenfeld H, Nestler EJ. Molecular Mechanisms of Resilience in Brain Reward Regions. <u>Cell.</u> 131:391-404 (2007). PMID 17956738.

Comment in <u>Cell</u> 131(2):232-4 Oct 19 (2007) Recommended article, Faculty of 1000 Biology

Exceptional article, Faculty of 1000 Medicine.

32) Lagace DC, Whitman MC, Noonan MA, Ables JL, DeCarolis NA, Arguello AA, Donovan MH, Fischer SJ, Farnbauch LA, Beech RD, Dileone RJ, Greer CA, Mandyam CD, **Eisch AJ**. Dynamic contribution of nestin-expressing stem cells to adult neurogenesis. <u>The Journal of Neuroscience</u>. 27:12623–12629 (2007). PMID 18003841, PMC 2587597.

Recommended article, Faculty of 1000 Biology.

- **33)** Fischer SJ, Arguello AA, Charlton JJ, Fuller DC, Zachariou V, **Eisch AJ**. Morphine dependence and regulation of subgranular zone proliferation relies on administration paradigm. <u>Neuroscience</u>. 151:1217-24 (2007). PMID 18248906.
- **34)** Donovan MH, Yamaguchi M, **Eisch AJ**. Dynamic expression of TrkB receptor protein on proliferating and maturing cells in the adult mouse dentate gyrus. <u>Hippocampus</u>. 18:435-439 (2008). PMID 18240316, PMC 2553009.
- **35)** Mandyam CD, Crawford E, Lee S, **Eisch AJ**, Rivier CL and Richardson HN. Stress experienced in utero reduces sexual dichotomies in neurogenesis, microenvironment, and cell death in the adult rat hippocampus. <u>Developmental Neurobiology</u>. 68(5):575-89 (2008). PMID 18264994, PMC 3679899.
- **36)** Noonan MA, Choi K-H, Self DW, **Eisch AJ**. Withdrawal from cocaine self-administration enhances hippocampal neurogenesis, but normalizes proliferation and maturation of neural progenitors, in the adult dentate gyrus subgranular zone. <u>The Journal of Neuroscience</u>. 28:2516-26 (2008). PMID 18322096.

Recommended article, <u>Faculty of 1000 Biology</u>

- **37)** Krishnan V, Graham A, Mazei-Robison MS, Lagace DC, Kim KS, Birnbaum S, **Eisch AJ**, Han PL, Storm DR, Zachariou V, Nestler EJ. Calcium-Sensitive Adenylyl Cyclases in Depression and Anxiety: Behavioral and Biochemical Consequences of Isoform Targeting. <u>Biological Psychiatry</u>. 64(4):336-43 (2008). PMID 18468583. PMC 2580057.
- **38)** Mandyam CD, Wee S, Crawford EF, **Eisch AJ**, Richardson HN, Koob GF. Varied access to intravenous methamphetamine self-administration differentially alters adult hippocampal neurogenesis. <u>Biological</u> Psychiatry. 64(11):958-65 (2008). PMID 18490002, PMC 2587157.
- 39) Krishnan V, Han MH, Mazei-Robison M, Iñiquez SD, Ables JL, Vialou V, Berton O, Ghose S, Covington

- HE 3rd, Wiley MD, Henderson RP, Neve RL, **Eisch AJ,** Tamminga CA, Russo SJ, Bolaños CA, Nestler EJ. AKT signaling within the ventral tegmental area regulates cellular and behavioral responses to stressful stimuli. <u>Biological Psychiatry</u>. 64(8):691-700 (2008). PMID 18639865, PMC 2742561.
- **40)** de Chevigny A, Cooper O, Vinuela A, Reske-Nielsen C, Lagace DC, **Eisch AJ**, Isascon O. Fate mapping and lineage analyses demonstrate the production of a large number of striatal neuroblasts after TGFalpha and noggin striatal infusions into the dopamine-depleted striatum. <u>Stem Cells</u>. 26(9):2349-60 (2008). PMID 18556510, PMC 2649803.
- **41)** Arguello AA, Harburg GC, Schonborn JR, Mandyam CD, Yamaguchi M, **Eisch AJ**. Time course of morphine's effects on adult hippocampal subgranular zone reveals preferential inhibition of cells in S phase of the cell cycle and a subpopulation of immature neurons. <u>Neuroscience</u>, 157(1):70-79 (2008). PMID 18832014, PMC 2694451.
- **42)** Lagace DC, Benavides DR, Kansy JW, Musacchio A, Greengard P, Bibb JA, **Eisch AJ**. Cdk5 is essential for adult hippocampal neurogenesis. <u>Proceedings of the National Academy of Sciences, USA</u>. 105(47):18567-71 (2008). PMID 19017796, PMC 2587597.
- **43)** Arguello AA, Fischer SJ, Schonborn JR, Markus RW, Brekken RA, **Eisch AJ.** Effect of chronic morphine on the dentate gyrus neurogenic microenvironment. <u>Neuroscience.</u> 159(3):1003-10 (2009). PMID 19356684, PMC 2694451.
- **44)** Gao Z, Ure K, Ables JL, Lagace DC, Nave K-A, Goebbels S, **Eisch AJ**, Hsieh J. Essential role of NeuroD in the survival and maturation of newborn neurons in the adult mammalian brain. <u>Nature Neuroscience</u>, Sep;12(9):1090-2 (2009). PMID 19701197, PMC 3365543.

Commented on in <u>Nature Neuroscience</u> Sep;12(9):1079-81 (2009) Recommended article, <u>Faculty of 1000 Biology</u>

- **45)** Coremans V, Ahmed T, Balschun D, D'Hooge R, De Vriese A, Cremer J, Antonucci F, Moons M, Baekelandt V, Reumers V, Cremer H, **Eisch AJ**, Lagace DC, Janssens T, Bozzi Y, Caleo M, Conway EM. Impaired neurogenesis, learning and memory and low seizure threshold associated with loss of neural precursor cell survivin. <u>BMC Neuroscience</u>, 11:2 (2010). PMID 20051123, PMC 2817683.
- **46)** Noonan MA, Bulin SA, Fuller D, **Eisch AJ**. Reduction of adult hippocampal neurogenesis confers vulnerability in an animal model of addiction. <u>The Journal of Neuroscience</u>, 30(1):304-315 (2010). PMID 20053911, PMC 2844797.

Featured in Nature, Research Highlights, 1/14/10 doi:10.1038/463138b

- **47)** Lagace DC, Donovan MH, Farnbauch LA, DeCarolis NA, Berton O, Nestler EJ, Krishnan V, **Eisch AJ**. Adult hippocampal neurogenesis is functionally important for stress-induced social avoidance. <u>Proceedings of the National Academy of Sciences, USA</u>. 107(9):4436-41 (2010). PMID 20176946, PMC 2840117.
- **48)** Li L, Harms KH, Ventura PB, Lagace DC, **Eisch AJ**, Cunningham LA. Focal cerebral ischemia induces a multilineage cytogenic response from adult subventricular zone that is predominantly gliogenic. <u>Glia.</u> 58(13):1610-9 (2010). PMID 20578055, PMC 2919586.
- **49)** Ables JL, DeCarolis NA, Johnson MA, Rivera PD, Gao Z, Cooper DC, Radtke F, Hsieh J, **Eisch AJ**. Notch1 is required for maintenance of the reservoir of adult hippocampal stem cells. <u>The Journal of Neuroscience</u>, 30(31):10484-92 (2010). PMID 20685991, PMC 2935844.

Recommended article. Faculty of 1000 Biology

- **50)** Zaccaria KJ, Lagace DC, **Eisch AJ**, McCasland JS. Autistic-like behavioral phenotype in GAP43 deficient mice. Genes, Brains, and Behavior, 2010 9(8):985-96 (2010). PMID 20707874, PMC 2975747.
- **51)** LaPlant Q, Vialou V, Covington III HE, Dumitriu D, Feng J, Warren BL, Maze I, Dietz DM, Watts EL, Iñiguez SD, Koo JW, Mouzon E, Renthal W, Hollis F, Wang H, Noonan MA, Ren Y, **Eisch AJ**, Bolanos CA, Kabbaj M, Xiao G, Neve RL, Hurd YL, Oosting RS, Fan G, Morrison JH, Nestler EJ. Dnmt3a regulates emotional behavior and spine plasticity in the nucleus accumbens. <u>Nature Neuroscience</u>. 13(9):1137-1143 (2010). PMID 20729844, PMC 2928863.

Commented on in Nature Neuroscience 13(9):1041-3 (2010)

52) Christoffel DJ, Golden SA, Dumitriu D, Robison AJ, Janssen WG, Ahn HF, Krishnan V, Reyes CM, Han M-H, Ables JL, **Eisch AJ**, Dietz DM, Ferguson D, Neve RL, Greengard P, Kim Y, Morrison JH, Russo SJ. IkappaB kinase regulates social defeat stress induced synaptic and behavioral plasticity. <u>The Journal of Neuroscience</u>. 31(1):314-21 (2011). PMID 21209217, PMC 3219041.

- **53)** Blundell J, Blaiss CA, Lagace DC, **Eisch AJ**, Powell CM. Block of glucocorticoid synthesis during reactivation inhibits extinction of an established fear memory. <u>Neurobiology of Learning and Memory</u> Feb 17 [EPub ahead of print] (2011). PMID 21333745, PMC 3356929.
- **54)** Kim EJ, Ables JL, Dickel LK, **Eisch AJ**, Johnson JE. Ascl1 defines a subset of long-term self-renewable neural stem cells in adult brain. <u>PLoS One</u>, Mar 31;6(3):e18472 (2011). PMID 21483754, PMC 3069117.
- **55)** Guo W, Allan AM, Zong R, Zhang L, Johnson EB, Schaller EG, Murthy AC, Goggin SL, **Eisch AJ**, Oostra BA, Nelson DL, Jin P, Zhao X. Ablation of FMRP in adult neural stem cells disrupts hippocampal-dependent learning. <u>Nature Medicine</u>, 17(5):559-65. (Epub Apr 24 2011). PMID 21516088, PMC 3140952.
- **56)** Choi KH, Edwards S, Graham D, Larson E, Whisler/Edwards K, Simmons D, Friedman A, Walsh J, Rahman Z, Monteggia LM, **Eisch AJ**, Neve R, Nestler EJ, Han MH, Self DW. Reinforcement-Related Regulation of AMPA Glutamate Receptor Subunits in the Ventral Tegmental Area Enhances Motivation for Cocaine. <u>The Journal of Neuroscience</u>. 31(21):7927-37 (2011). PMID 21613507, PMC 3103081.
- **57)** Speed HE, Blaiss CA, Kim A, Haws ME, Melvin NR, Jennings M, **Eisch AJ**, Powell CM. Delayed reduction of hippocampal synaptic transmission and spines following exposure to repeated, subclinical doses of organophosphorus pesticide in adult mice. <u>Toxicological Sciences</u>. (Epub Sep 26 2011). Jan 125(1):196-208 (2012). PMID 21948870, PMC 3247802.
- **58)** Sankararaman A, Masiulis I*, Richardson DR*, Andersen JM, Mørland J, **Eisch AJ**. Methadone does not alter key parameters of adult hippocampal neurogenesis in the heroin-naïve rat. <u>Neuroscience Letters.</u> (Epub Apr 1 2012). May 10;516(1):99-104 (2012). PMID 22487733, PMC not applicable (not NIH funded) *authors contributed equally to this work.
- **59)** Petrik D, Jiang Y, Birnbaum SG, Powell CM, Kim M-S, Hsieh J, **Eisch AJ**. Functional and mechanistic exploration of an adult neurogenesis-promoting small-molecule. <u>The Journal of the Federation of American Societies for Experimental Biology (The FASEB Journal)</u>. Aug 26(8):3148-62 (Epub Apr 27 2012). PMID 22542682, PMC 3405259.
- **60)** Teixeira CM, Kron MM, Masachs N, Zhang H, Lagace DC, Martinez A, Reillo I, Duan X, Bosch C, Pujadas L, Brunso L, Song H, **Eisch AJ**, Borrell V, Howell BW, Parent JM, Soriano E. Cell-autonomous inactivation of the Reelin pathway impairs adult neurogenesis in the hippocampus. <u>The Journal of Neuroscience</u>. Aug 29;32(35):12051-12065 (2012) PMID 22933789, PMC 3475414.
- **61)** Decarolis NA, Mechanic M, Petrik D, Carlton AF, Malhotra S, Ables JL, Bachoo R, Lagace DC, **Eisch AJ** In vivo contribution of nestin- and GLAST-lineage cells to adult hippocampal neurogenesis. Hippocampus. 23: 708–719. doi: 10.1002/hipo.22130 (2013). PMID 23554226, PMC 3718551.
- **62)** Petrik D, Yun S*, Latchney SE*, Kamrudin S, LeBlanc JA, Bibb JA, **Eisch AJ**. Early postnatal *in vivo* gliogenesis from nestin-lineage progenitors requires Cdk5. <u>PLoS One</u>, Aug 26;8(8):e72819. doi: 10.1371/journal.pone.0072819. (2013) PMID 23991155, PMC 3753242.
 - *authors contributed equally to this work.
- **63)** Ninkovic J, Steiner-Mezzadri A, Jawerka M, Akinci U, Masserdotti G, Petricca S, Fischer J, von Holst A, Beckers J, Lie CD, Petrik D, Miller E, Tang J, Wu J, Lefebvre V, Demmers J, **Eisch AJ**, Metzger D, Crabtree G, Irmler M, Poot R, Götz M. The BAF complex interacts with Pax6 in adult neural progenitors to establish a neurogenic cross-regulatory transcriptional network. <u>Cell Stem Cell</u>. (Epub 2013 Aug 8) Oct 3;13(4):403-18. doi: 10.1016/j.stem.2013.07.002 (2013). PMID 23933087, PMC in progress.
- **64)** Rivera PD*, Shih H-Y*, LeBlanc JA, Cole MG, Amaral WZ, Mukherjee S, Zhang S, Lucero MJ, DeCarolis NA, Chen BPC, **Eisch AJ**. Acute and Fractionated Exposure to High-LET 56Fe HZE Particle Radiation Both Result in Similar Long-Term Deficits in Adult Hippocampal Neurogenesis. <u>Radiation Research</u>. (Epub Dec 9 2013) Dec;180(6):658-67. doi: 10.1667/RR13480.1. (2013) PMID 24320054, PMC in progress.
 - *authors contributed equally to this work.
- **65)** Latchney SE, Masiulis I, Zaccaria KJ, Lagace DC, Powell CM, McCasland JS, **Eisch AJ**. Developmental and adult GAP-43 deficiency in mice dynamically alters hippocampal neurogenesis and mossy fiber volume. Developmental Neuroscience. *In press*.

Select peer-reviewed publications in progress

Latchney SE, Rivera PD, Mao XW, Ferguson VL, Bateman TA, Stodieck LS, Nelson GA, **Eisch AJ**. The effect of spaceflight on mouse olfactory bulb volume, neurogenesis, and cell death indicates the

- protective effect of novel environment. In revision for resubmission to Journal of Applied Physiology.
- Petrik D, Masiulis I*, Yun S*, Zhang Z, Wu JI, **Eisch AJ**. Chromatin remodeling factor Brg1 supports the maintenance but restricts the lifespan of adult neural stem cells. *In revision for resubmission to <u>Stem Cells.</u>*
 - *authors contributed equally to this work.
- DeCarolis NA, Ahn HF, Lagace DC, Ables JL, Redfield RL, Cole MG, Chen BPC, **Eisch AJ**. Running after irradiation ameliorates the proliferation deficit but not the nestin-expressing Type-1 cell deficit in the adult hippocampal subgranular zone. *In revision for resubmission to <u>Hippocampus</u>.*
- Masiulis I*, Arguello AA*, Tamil M, Ye J, **Eisch AJ**. Chronic morphine does not alter S phase length of the hippocampal progenitor cell cycle. *In revision for resubmission to Neuroscience*.

 *authors contributed equally to this work.
- Cho K, Ito N*, Lybrand Z*, Brulet R, Zhang L, Good L, Ure K, Nave K-A, Kernie SG, Birnbaum SG, Scharfman HE, **Eisch AJ**, Hsieh J. Aberrant hippocampal neurogenesis drives epilepsy and associated cognitive decline. *Under consideration*, <u>Nature Neuroscience</u>.

 *authors contributed equally to this work.
- Latchney SE*, Jaramillo TC*, Rivera PD, Espinosa-Bacerra F, **Eisch AJ**, Powell CM. Chronic P7C3 treatment restores hippocampal neurogenesis in the Ts65Dn mouse model of Down syndrome. *In preparation*.
 - *authors contributed equally to this work.
- Yun S*, Lagace DC*, Petrik D, Donovan MH, Noonan MA, Reister R, Farnbauch LF, Riethmacher D, Gershenfeld H, **Eisch AJ**. Depressive phenotype resulting from mild ablation of adult neuorgenesis by nestin-CreERT2-mediate expression of diptheria toxin fragment A in mice. *In preparation.**authors contributed equally to this work.
- DeCarolis NA, Rivera PD*, Ahn HF*, Shih H-Y, Amaral WZ, LeBlanc JA, Malhotra S, Mukherjee S, Chen BPC, **Eisch AJ**. Impact of high-LET 56Fe particle irradiation on adult hippocampal neural stem cells and neurogenesis in vivo: implications for neurodegeneration. *In preparation.**authors contributed equally to this work.
- Lucero MJ, Redfield RL*, Ito N*, Mukherjee S, Shih H-Y, Rivera PD, Birnbaum SG, Chen BPC, **Eisch AJ**. Space radiation improves pattern separation in older mice without influencing gross hippocampal function. *In preparation*.
 - *authors contributed equally to this work.
- Yun S, Lucero MJ, Ito N, Rivera PD, Birnbaum SG, Chen BPC, **Eisch AJ**. Molecular basis for space radiation-induced deficits hippocampal function in aged animals. *In preparation*.
- Latchney SE*, Jiang Y*, Petrik D, Hsieh J^, **Eisch AJ**^. Inducible deletion of Mef2A/C/D from nestinexpressing stem cells and progeny impairs adult hippocampal neurogenesis in vivo. *In preparation.* *authors contributed equally to this work. ^co-corresponding authors
- Bulin SE, Richardson DR, Song KH, Solberg TD, **Eisch AJ.** Reduction of adult hippocampal neurogenesis via cranial irradiation enhances morphine self-administration and morphine-induced locomotor sensitization. *In preparation*.
- Rivera PR, **Eisch AJ**. Adult-generated hippocampal neurons in drug/context association: dissociation of behavioral and cellular effects? *In preparation*.
- Yun S, Mukherjee S, Kang CE, Han Y, Chetkovich DM, **Eisch AJ.** Circuit-level analysis of a novel target for depression treatment: rodent and postmortem perspectives. *In preparation.*

Published peer-reviewed review papers, book chapters, and web contributions

- **1)** Nestler EJ, Barrot M, DiLeone R, **Eisch AJ**, Gold SJ, Monteggia LM. Neurobiology of Depression. Neuron. 34:13-25 (2002). PMID 11931738.
- **2) Eisch AJ**. Adult neurogenesis: implications for neuropsychiatry. <u>Progress in Brain Research.</u> 138:317-344 (2002). PMID 12432777.
- 3) Eisch AJ and Nestler EJ. To be or not to be: Adult neurogenesis and psychiatry. Clinical Neuroscience Research. 2:93-108 (2002).

- **4) Eisch AJ** and Mandyam CD. Drug dependence and addiction, II: Adult neurogenesis and drug abuse. American Journal of Psychiatry. 161:426 (2004). PMID 14992964.
- **5) Eisch AJ** and Mandyam CD. Beyond BrdU: Basic and clinical implications for analysis of endogenous cell cycle proteins *in* Focus on Stem Cell Research E.V. Greer (Ed). Nova Scientific. 111-142 (2004).
- **6)** German DC and **Eisch AJ.** Mouse models of Alzheimer's disease: Insight into treatment. <u>Reviews in the Neurosciences.</u> 15:353-369 (2004). PMID 15575491.
- **7)** Thome J and **Eisch AJ**. Neurogenesis: Relevance for pathophysiology and pharmacotherapy of psychiatric disorders (language: German). <u>Nervenarzt.</u> 76:11-19 (2005). PMID 15316619.
- **8) Eisch AJ.** The involvement of brain-derived neurotrophic factor in memory and depression. <u>Science and Technology Yearbook</u>. MacGraw Press. (2005).
- **9) Eisch AJ** and Mandyam CD. Adult neurogenesis and CNS cell cycle analysis: Novel tools for exploration of the neural causes and correlates of psychiatric disorders. D. Janigro (Ed) <u>Cell Cycle in the Central Nervous System. Humana Press.</u> (2005).
- **10) Eisch AJ.** Microscopy II: Image Analysis & 3D Reconstruction, Purdue University Cytometry Laboratories, www.cyto.purdue.edu (2005).
- **11)** Lagace DC and **Eisch AJ.** Mood stabilizing drugs: Are their neuroprotective aspects clinically relevant? <u>Psychiatric Clinics of North America</u>. 28:399-414 (2005). PMID 15826739.
- **12) Eisch AJ.** Common neural adaptations and bidirectional influences of stress and addiction: Recent insights from basic research. <u>Journal of Dual Diagnosis</u>. 1:25-46 (2005).
- **13) Eisch AJ** and Harburg GC. Opiates, psychostimulants, and adult hippocampal neurogenesis: Insights for addiction and stem cell biology. <u>Hippocampus.</u> 16:271-286 (2006). PMID 16411230.
- **14)** Noonan MA and **Eisch AJ**. *In vivo* regulation of neural progenitors by cannabinoids. <u>Chemistry Today</u>. 24:28-32 (2006).
- **15)** Lagace DC, Noonan MA, **Eisch AJ**. Hippocampal neurogenesis: a matter of survival. <u>American Journal of Psychiatry</u>. 164:205 (2007). PMID 17267780.
- **16) Eisch AJ** and Mandyam CD. Adult neural progenitors: Can analysis of endogenous cell cycle proteins move us "beyond BrdU"? <u>Current Pharmaceutical Biotechnology.</u> 8:147-165 (2007). PMID 17584088.
- **17)** DeCarolis NA, Wharton KA, **Eisch AJ**. Which way does the Wnt blow? Exploring the duality of canonical Wnt signaling on cellular aging. <u>BioEssays</u>. 30: 102-106 (2008). PMID 18200563.
- **18) Eisch AJ**, Cameron HA, Encinas JM, Meltzer LA, Ming G-L, Wadiche-Overstreet LS. Adult neurogenesis, mental health, and mental illness: Hope or hype? <u>The Journal of Neuroscience</u>. 28(46): 11785-91 (2008). PMID 19005040, PMC 2793333.
- **19)** Johnson MA, Ables JL, **Eisch AJ**. Cell-intrinsic signals that regulate adult neurogenesis *in vivo*: insights from inducible approaches. BMB Reports. 42(5): 245-259 (2009). PMID 19470237, PMC3601036.
- **20)** Jessberger S, Gage FH, **Eisch AJ**, Lagace DC. Making a Neuron: Cdk5 in Embryonic and Adult Neurogenesis. <u>Trends in Neuroscience.</u> 32(11):575-82 (2009). PMID 19782409, PMC 2767479.
- **21)** DeCarolis NA and **Eisch AJ**. Hippocampal neurogenesis as a target for the treatment of mental illness: A critical evaluation. Neuropharmacology. 58(6):884-93 (2010). PMID 20060007, PMC 2839019.
- **22)** Hsieh J and **Eisch AJ**. Epigenetics, hippocampal neurogenesis, and neuropsychiatric disorders: unraveling the genome to understand the mind. <u>Neurobiology of Aging.</u> 39(1):73-84 (2010). PMID 20114075, PMC 2874108.
- **23)** Ables JL, Breunig JJ, **Eisch AJ^**, Rakic P^. Not(ch) Just Development: Notch signaling in the Adult Brain. Nature Reviews Neuroscience. 12(5):269-83 (2011). PMID 21505516, PMC 3159580.
 - ^co-corresponding authors
 - Feature article, Nature Reviews Neuroscience.
- **24)** Bulin SE, Sankararaman A, **Eisch AJ**. Psychostimulants, opiates, and adult hippocampal neurogenesis. *In* <u>Drug Addiction and Adult Neurogenesis</u>. (2011) Editor MF Olive.
- **25)** Masiulis I, Yun S, **Eisch AJ**. The interesting interplay between interneurons and adult hippocampal neurogenesis. <u>Molecular Neurobiology</u>. Dec;44(3):287-302. Epub 2011 Sep 29. (2011) PMID 21956642, PMC 3756898.
- 26) Petrik D, Lagace DC, Eisch AJ. The neurogenesis hypothesis of affective and anxiety disorders: are we

- mistaking the scaffolding for the building? <u>Neuropharmacology</u>. Jan;62(1):21-34. Epub 2011 Sep 19 (2012) PMID 21945290, PMC 3698048.
- **27) Eisch AJ** and Petrik D. Neurogenesis and depression: a road to remission? <u>Science.</u> (2012) Oct 5;338(6103):72-5. doi: 10.1126/science.1222941. PMID 23042885, PMC 3756889.
- **28)** Bulin SE, Masiulis I, Rivera PD, **Eisch AJ.** Addiction, Hippocampal Neurogenesis, and Neuroplasticity in the Adult Brain. In: <u>Biological Research on Addiction: Comprehensive Addictive Behaviors and Disorders</u>. Editor PG Miller. Elsevier Inc., San Diego: Academic Press, pp. 291-303. (2013).
- **29)** Latchney SE and **Eisch AJ**. Therapeutic application of neural stem cells and adult neurogenesis for neurodegenerative disorders: regeneration and beyond. <u>European Journal of Neurodegenerative Diseases</u>. *In press*.

Select peer-reviewed review papers, chapters, and books in progress

Co-editor: Kuhn HG and **Eisch AJ.** Neural Stem Cells in Development, Adulthood, and Disease. Volume in the Series: <u>Stem Cell Biology and Regenerative Medicine.</u> Series editor: Kursad Turksen. *In preparation for 2014 publication.*

Eisch AJ and Canales JJ. Neurogenesis and Addiction. In: <u>Hippocampal neurogenesis: implications for health and psychopathology</u>. Editor: Canales JJ. Elsevier Inc., San Diego: Academic Press, *In preparation for 2015 publication*.

APPOINTMENTS, SOCIETIES, AND JOURNAL AFFILIATIONS

Member, Society for Neuroscience (000154765)	1991-present
Member, Integrative Biology Graduate Program at UT Southwestern	2002-present
Member, UT Southwestern chapter of Sigma Xi Honor Society for Scientist/Engineers	2005-present
President, UT Southwestern chapter of Sigma Xi Honor Society for Scientist/Engineers	2005-2010
Co-founder and Organizer, Stem Cells in Neuroscience (SCIN) Basic research workshop group at UT Southwestern	2005-present
Member, Neuroscience Graduate Program at UT Southwestern	2008-present
Associate Editor, Neuroscience Letters Neuro/gliogenesis, cell lineage/development, and cortical development	2009-2013
Review Editor, Frontiers in Neurogenesis	2009-present
Member of Standing Study Section, NIH , " Neurobiology of Motivated Behavior " (NMB) Four-year term. Meetings February, June, and October of each year	7/1/09-6/30/13
Editorial Board, Developmental Neuroscience	2011-2015
Editorial Board, European Journal of Neurodegenerative Diseases	2011-present
Member, International Society of Neurochemistry	2012-present
Editorial Board, Brain Plasticity	2013-present
Member, Radiation Research Society	2013-present
Consulting Editor, Behavioral Neuroscience	2014

Ad-hoc reviewer for 40+ journals including Behavioral Brain Research, Biological Psychiatry, Brain Research, Brain Research Bulletin, Cell Research, Cell Stem Cell, CNS Neurological Disorders and Drug Targets, Current Biology, Current Opinion in Neurobiology, Epilepsia, European Journal of Neuroscience, Experimental Neurology, FASEB Journal, Frontiers in Neurogenesis, Hippocampus, International Journal of Psychopharmacology, Journal of Alzheimer's Disease, Journal of Clinical Investigation, Journal of Comparative Neurology, Journal of Neuroscience, Journal of Pharmacology and Experimental Therapeutics, Molecular and Cellular Neuroscience, Molecular Neurobiology, Molecular Psychiatry, Nature, Nature Medicine, Nature Neuroscience, Neurobiology

of Aging, Neurobiology of Learning and Memory, Neuron, Neuropharmacology, Neuropsychopharmacology, Neuroscience, Neuroscience Letters, Neuroscience Research, Neurotoxicology and Teratology, Pain, Pediatric Research, Physiology and Behavior, Proceedings of the National Academy of Science-USA, Progress in Neuropsychopharmacology and Behavioral Pharmacology, Psychiatry Research, Psychoneuroendocrinology, Psychopharmacology, Public Library of Science Biology, Public Library of Science One, Science, Stem Cells, Synapse, Trends in Neuroscience.

NATIONAL AND INTERNATIONAL REVIEW COMMITTEES

- 1) 08/02 Reviewer, Special Review Group for **National Institute on Alcohol Abuse and Alcoholism** on "Stem Cell Research for Alcohol-related Disorders" (RFA-ZAA1-GG22)
- 2) 06/03 Reviewer, Special Review Group for **National Institute on Alcohol Abuse and Alcoholism** on "Stem Cell Research for Alcohol-related Disorders" (RFA-ZAA1-GG22)
- 3) 08/03 Reviewer, **National Institute on Drug Abuse**, Cutting Edge Basic Research Award (CEBRA)
- 4) 12/03 Reviewer, **NIH**, Brain Disorders and Clinical Neuroscience study section (ZRG1-CNNT 02)
- 5) 04/04 Reviewer, **National Institute of Mental Health**, RO3 B/Start study section
- 6) 05/04 Reviewer, **National Institute on Drug Abuse**, CEBRA program
- 7) 06/04 Reviewer, National Institute on Alcohol Abuse and Alcoholism, Biomedical Research Subcomm.
- 8) 08/04 Reviewer, **National Institute on Drug Abuse**, "Consequences of marijuana use on the developing brain" (RFA-DA-04-016)
- 9) 12/04 Reviewer, Wellcome Trust, United Kingdom
- 10) 05/05 External reviewer, NIH/UTHC San Antonio SCORE program
- 11) 03/06 Reviewer, **National Institute on Drug Abuse**, Special Emphasis Panel/Scientific Review Group (ZDA1 RXL-E 24)
- 12) 05/06 Reviewer, NIH/UTHC San Antonio SCORE program
- 13) 07/06 Reviewer, NIH, F03A Fellowship Meeting
- 14) 07/06 Reviewer, National Institute of Aging, P01 Reverse site visit meeting
- 15) 07/06 Reviewer, **National Institute of Mental Health**, ZMH1 ERB-S-07 "HIV and Psychiatric Comorbidity Research Project" (RFA-MH-07-020-021)
- 16) 10/06 Reviewer, Medical Research Council of South Africa, South Africa
- 17) 10/06 Reviewer, **National Institute on Drug Abuse**, Special Emphasis Panel/Scientific Review Group (ZDA1 RXL-E-03)
- 18) 11/06 Reviewer, **Wellcome Trust**, United Kingdom
- 19) 01/07 Reviewer, City University of New York Internal Grant Reviews
- 20) 01/07 Reviewer, Alzheimer's Association
- 21) 01/07 Reviewer, National Science Foundation
- 22) 05/07 External reviewer, NIH/UTHC San Antonio SCORE program
- 23) 07/07 Reviewer, National Institute on Drug Abuse, Program Project Review Group (ZDA1 RXL-E 30)
- 24) 11/07 Reviewer, National Space and Aeronautics Administration, CNS NSCOR review panel
- 25) 01/08 Reviewer, NIH, "Neural Cell Fate" (NCF) Study Section
- 26) 06/08 External reviewer, Auckland Medical Research Foundation, New Zealand
- 27) 07/08 Reviewer, **NIH**, Special Emphasis Panel/Scientific Review Group for "Substance Abuse and Glial Regulation of Nervous System Function" (ZDA MXH-H 11 1; RFA DA-08-013.14.15)
- 28) 10/08 Reviewer (ad hoc), NIH, "Neurobiology of Motivated Behavior" (NMB) Study Section
- 29) 10/08 Reviewer, New York State Department of Health and the Empire State Stem Cell Board (NYSTEM) review board for Neural Stem Cells Characterization Panel
- 30) 11/08 Reviewer, Alzheimer's Disease Center, UT Southwestern

- 31) 06/09 Reviewer, NIH/NIDA, Special Emphasis Panel/Scientific Review Group (ZRG1 BCMB-A 51)
- 32) 06/09 Reviewer, NIH/NIDA, Special Emphasis Panel/Scientific Review Group (ZRG1 MDCN-A 58)
- 33) 07/09 Reviewer, NIH/NIDA, Special Emphasis Panel/Scientific Review Group RFA OD09-003 CHALLENGE GRANTS PANEL # 12 2009/10 ZRG1 ETTN-A (58) R
- 34) 07/09 Reviewer, NIH, Neurodevices and Neuroimaging Review Panel. 2009/10 ZRG1 ETTN-F (99) RRFA
- 35) 08/09 Reviewer, National Space and Aeronautics Administration, Washington, D.C.
- 36) 09/09 Reviewer (study section member), **Neurobiology of Motivated Behavior**, Washington, D.C.
- 37) 11/09 Reviewer, NIH CEBRA grants 2010/01 ZDA1 GXM-A (07) 1, Washington, D.C.
- 38) 02/10 Reviewer (study section member), Neurobiology of Motivated Behavior/NIH-CSR, San Diego, CA
- 39) 04/10 Reviewer, Women's Health Research at Yale, New Haven, CT
- 40) 06/10 Reviewer (study section member), **Neurobiology of Motivated Behavior**, Washington, D.C.
- 41) 07/10 Reviewer, Science Foundation Ireland.
- 42) 10/10 Reviewer, Deutsche Forschungsgemeinschaft (German Research Foundation).
- 43) 10/10 Reviewer (study section member), Neurobiology of Motivated Behavior, Washington, D.C.
- 44) 11/10 Reviewer, NIH, F03A Fellowship Meeting (Neurodevelopment, Synaptic Plasticity and Neurodegeneration Fellowship Study Section) San Diego, CA
- 45) 02/11 Reviewer (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, San Diego, CA (telephone reviewer)
- 46) 03/11 Reviewer, National Institute on Drug Abuse, Cutting Edge Basic Research Award (CEBRA)
- 47) 06/11 Reviewer (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, Washington, DC (telephone reviewer)
- 48) 08/11 Reviewer, **National Space Biomedical Research Institute**, Postdoctoral Fellowship Review Panel, Washington, D.C. (telephone reviewer)
- 49) 02/12 Reviewer (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, San Francisco, CA (telephone reviewer)
- 50) 04/12 Reviewer, **Transformative R01 panel, NIH-CSR**, Baltimore, MD (mail reviewer)
- 51) 04/12 Reviewer, **NSCOR (NASA)**, Nelson/Limoli, Irvine, CA (telephone reviewer)
- 52) 06/12 Reviewer (study section member), Neurobiology of Motivated Behavior/NIH-CSR, Baltimore, MD
- 53) 07/12 Reviewer, **Science Foundation Ireland** (mail reviewer)
- 54) 07/12 Reviewer, NASA Space Radiobiology Review Panel, CNS applications (mail reviewer)
- 55) 08/12 Reviewer, Special Emphasis Panel/Scientific Review Group **2012/10 ZRG1 MDCN-G (02) M** (internet assisted meeting/IAM)
- 56) 10/12 Reviewer, (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, New Orleans, LA
- 57) 02/13 Reviewer, (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, Santa Monica, CA (telephone reviewer)
- 58) 06/13 Reviewer, (study section member), **Neurobiology of Motivated Behavior/NIH-CSR**, Washington, DC (telephone reviewer)

INVITED NATIONAL AND INTERNATIONAL LECTURES/WORKSHOP PARTICIPANT

- 1) 03/00 Boston College, Department of Psychology, Boston, MA
- 2) 08/00 National Institute on Drug Abuse, Molecular Genetics Laboratory, Bethesda, MD
- 3) 08/0 Netherlands Institute for Brain Research, Conference on "Plasticity in the Adult Brain", Amsterdam, the Netherlands

- 4) 01/02 Grand Rounds in Psychiatry, <u>UT Southwestern Medical Center</u>, Dallas, TX
- 5) 02/02 <u>INSERM Phillipe Laudat Conference</u> on "Neural Stem Cells: From Development to the Clinic" Aix-les-Bains, France
- 6) 05/02 Regis University, Denver, CO
- 7) 06/02 <u>Dutch Endo-Psycho-Neuro Conference</u>. Session on "Adult Neurogenesis: Potential and Problems", Doorwerth, The Netherlands
- 8) 02/03 National Institute of Drug Abuse, workshop on "Stem Cells and Drug Abuse", Bethesda, MD
- 9) 04/03 UT Texas Health Science Center, Department of Biology. San Antonio, TX
- 10) 05/03 <u>Society for Biological Psychiatry</u>. Session on "Environmental and Pharmacological Regulation of Adult Neurogenesis", Philadelphia, PA
- 11) 05/03 The Catholic University of Korea, College of Medicine. Seoul, South Korea
- 12) 06/03 University of Illinois, Champaign Urbana, Department of Psychology. Champaign, IL
- 13) 11/03 Invited to present research as winner of Young Investigator Award
 National Alliance for Research on Schizophrenia and Depression. New York, NY
- 14) 12/03 University Health Science Center, Department of Pharmacology. Denver, CO
- 15) 03/04 6th Neurochemistry Winter Conference. Session on "Drug Addiction and Hippocampal Plasticity", Solden, Austria
- 16) 03/04 Trinity College, Department of Biology. San Antonio, TX
- 17) 04/04 Texas A&M, Department of Psychology. College Station, TX
- 18) 05/04 Harvard University, McLean Hospital, Department of Psychiatry. Belmont, MA
- 19) 10/04 National Institute of Drug Abuse, workshop on "Mechanisms of Brain Resiliency and Repair", Bethesda, MD
- 20) 10/04 Co-Chair of minisymposium "New Horizons for New Neurons: Adult Neurogenesis and Psychiatry" selected for annual meeting of the <u>Society for Neuroscience</u>, San Diego, CA (inaugural year of minisymposium)
- 21) 01/05 Elan Pharmaceuticals, South San Francisco, CA
- 22) 09/05 Yale University, Department of Psychiatry. New Haven, CT
- 23) 01/06 Invited participant, <u>The Academy of Medicine</u>, <u>Engineering and Science of Texas</u> (TAMEST) annual conference, Houston, TX
- 24) 02/06 UT Austin, Department of Psychology. Austin, TX
- 25) 03/06 Invited participant, NIH Blueprint meeting on neurodegeneration, Bethesda, MD
- 26) 09/06 Texas Academy of Math and Sciences, University of North Texas. Denton, TX
- 27) 11/06 Howard University, Department of Biology, Washington, DC
- 28) 05/07 Katholieke Universiteit Leuven, Flanders Institute for Biotechnology (VIB), Leuven, Belgium
- 29) 06/07 <u>University Medical Centre Groningen</u>, Behavioral & Cognitive Neurosciences Symposium on "Glia and stem cells: new functions beyond support and repair". Groningen, The Netherlands
- 30) 09/07 Texas Academy of Math and Sciences, University of North Texas. Denton, TX
- 31) 09/07 University of New Mexico, Department of Neurosciences. Albuquerque, NM
- 32) 10/07 Korean Society of Medical Biochemistry and Molecular Biology Autumn Symposium, Seoul, South Korea
- 33) 10/07 National Aeronautics and Space Administration, Houston, TX
- 34) 11/07 <u>UT Southwestern Medical Center,</u> Neuroscience Seminar for "Genes to Behavior: New Horizons in the Treatment of Brain Disease". Dallas, TX
- 35) 11/07 University of North Texas, Biological Sciences Seminar. Denton, TX

- 36) 03/08 UT Southwestern Medical Center, Cancer Center Retreat, Dallas, TX
- 37) 04/08 UT Southwestern Medical Center, STARS Symposium on "What's New in Stem Cells?", Dallas, TX
- 38) 06/08 National Aeronautics and Space Administration, Annual meeting of CNS Researchers, Philadelphia, PA
- 39) 09/08 Emory University, Department of Pharmacology, Atlanta, GA
- 40) 09/08 National Institute of Drug Abuse, Intramural Research Speaker Program, Bethesda, MD
- 41) 10/08 Texas Academy of Math and Sciences, University of North Texas. Denton, TX
- 42) 11/08 Invited speaker, <u>National Institute of Drug Abuse</u> premeeting at the annual meeting for the Society for Neuroscience on "Cortical Development and Substance Abuse Induced Abnormality." San Diego, CA
- 43) 11/08 Chair of minisymposium and speaker for "Adult Neurogenesis, Mental Health, and Mental Illness: Hope or Hype?" selected for annual meeting of the <u>Society for Neuroscience</u>, San Diego, CA
- 44) 12/08 Howard University School of Medicine, Department of Physiology and Biophysics. Washington, DC
- 45) 12/08 University of Toledo Health Science Center, Department of Neuroscience, Toledo, OH
- 46) 01/09 Invited speaker, 24th Annual Winter Conference on Current Issues In Developmental Psychobiology, St. Croix, United States Virgin Islands
- 47) 02/09 Invited speaker, meeting of the <u>American Neuropsychiatry Association</u> as part of session entitled "New Approaches to the Modulation of Emotional Circuitry," San Antonio, TX
- 48) 03/09 Invited speaker, "Neurofest", State University of New York Upstate Medical Center, Syracuse, NY
- 49) 04/09 Invited speaker, meeting of the <u>American Society for Pharmacology and Experimental Therapeutics</u> as part of session entitled "Neuroplastic and Neurodegenerative Changes Associated with Drug Abuse and Addiction," New Orleans, LA
- 50) 05/09 <u>BIO International Technology Convention Symposium</u>, session on "Neurogenesis: Enhancing brain cell growth for the treatment of depression," Atlanta, GA
- 51) 06/09 <u>CREST Neuroscience International Symposium</u>, session on "Hippocampal neurogenesis: its implication in neural functions and mental diseases", Awaji Island, Japan
- 52) 06/09 Kyoto University, Institute for Virus Research. Kyoto, Japan
- 53) 06/09 Hoshi University, School of Pharmacy and Pharmaceutical Sciences. Tokyo, Japan
- 54) 06/09 Tohoku University, Department of Developmental Neuroscience. Sendai, Japan
- 55) 07/09 National Institute for Medical Research, London, England
- 56) 07/09 Helmholtz Zentrum München, Munich, Germany
- 57) 07/09 Center for Regenerative Therapies, Dresden, Germany
- 58) 07/09 Hoffman La-roche, Basel, Switzerland
- 59) 07/09 International Heavy Ion Symposium, Cologne, Germany
- 60) 07/09 International Narcotics Research Conference, NIDA Symposium speaker, Portland, OR
- 61) 07/09 <u>UT Southwestern Medical Center</u>, Student Undergraduate Research Fellowship (SURF) series Dallas, TX
- 62) 09/09 <u>University of South Dakota</u>, Sanford School of Medicine. Invited speaker for annual symposium on "Research Frontiers in Brain Function and Disorders". Ponca, NE
- 63) 10/09 <u>UT Southwestern Medical Center</u>, STARS Symposium on Radiation Risks Associated with Space Travel. Dallas, TX
- 64) 11/09 Hotchkiss Brain Institute, University of Calgary, Calgary, Ontario, Canada
- 65) 12/09 UT San Antonio, Department of Psychiatry Grand Rounds Speaker. San Antonio, TX
- 66) 04/10 The Scripps Research Institute, La Jolla, CA
- 67) 04/10 Binghamton University, Harpur College Dean's Workshop Series in Psychology. Binghamton, NY

- 68) 05/10 <u>Canadian College of Neuropsychopharmacology</u>, Speaker for Special Presidential Lecture Series on "Adult Hippocampal Neurogenesis and Psychiatry". Ottawa, Canada
- 69) 05/10 NASA, Debate Participant for Panel on CNS Risks, 21st Annual NASA Space Radiation Investigators' Workshop, Upton, NY
- 70) 06/10 NASA, Space Radiation Summer School speaker, Upton, NY
- 71) 06/10 <u>UT Southwestern,</u> Student Teacher Access to Resources at Southwestern (STARS) seminar series, Dallas, TX
- 72) 07/10 International Narcotics Research Conference, Featured Symposium Speaker, Malmö, Sweden
- 73) 07/10 University of Gothenburg, Institute for Brain Research, Gothenburg, Sweden
- 74) 07/10 UT Southwestern. Summer Undergraduate Research Fellowship (SURF) seminar series, Dallas, TX
- 75) 08/10 <u>23rd Annual European College of Neuropsychopharmacology (ECNP)</u>, invited Speaker for symposium "Stress and affective disorders: new insights from animal models". Amsterdam, The Netherlands.
- 76) 09/10 Institute of Neuroscience, INSERM, Bordeaux, France
- 77) 09/10 <u>European Behavioural Pharmacology Society</u> (EBPS) workshop on "Drugs, Psychiatric Disorders, and Neurogenesis. Session "Drugs of abuse and new neurons." Tours, France
- 78) 09/10 University of Pittsburgh School of Medicine, Translational Neuroscience Programs, Pittsburgh, PA
- 79) 10/10 <u>1st Meeting on the Pharmacological Modulation of Adult Neurogenesis</u>, Closing Plenary Lecturer, Novaro, Italy
- 80) 11/10 <u>UT Southwestern,</u> Student Teacher Access to Resources at UT Southwestern (STARS). Fall symposium speaker on "The Nervous System", Dallas, TX
- 81) 11/10 <u>Kavli Frontiers of Science Meeting, National Academy of Sciences, USA,</u> Chair of and speaker for session "Neural Stem Cells". The Beckman Center, Irvine, CA
- 82) 11/10 Mt. Sinai School of Medicine, Friedman Brain Institute Translational Neuroscience Seminar Series, NY, NY
- 83) 12/10 <u>University of Pennsylvania School of Medicine</u>, Center for Neurobiology and Behavior, Philadelphia, PA
- 84) 01/11 Keystone Meeting on Adult Neurogenesis, Taos, NM
- 85) 02/11 <u>Inaugural Seymour Benzer Lecturer</u>, <u>National Academy of Sciences</u>. Sponsored by Nobel Laureate Sydney Brenner to honor researcher in neuroscience or genetics. Presented as part of "Distinctive Voices @ The Beckman Center" for the National Academy of Sciences, Irvine, CA. Video available: http://www.youtube.com/DistinctiveVoicesBC#p/u/0/-jD5vl7xkuo
- 86) 09/11 <u>Euroglia Meeting</u>, Session "Glia and neural stem cells in cognitive and psychiatric disorders". Prague, Czech Republic
- 87) 09/11 Italian Society of Pharmacology 35th National Congress, Plenary Lecturer. Bologna, Italy
- 88a) 11/11 Anxiety and Depression: 21st Neuropharmacology Conference. Session "Emerging non-monoaminergic targets". Tyson's Corner, VA. Due to unexpected family medical reasons, a colleague (Dr. Diane Lagace, University of Ottawa) presented our work on my behalf.
- 88b) 03/12 UT Dallas, Center for Brain Health, Brain Health Scientific Frontiers lecture series, Dallas, TX
- 89) 07/12 Meeting of EPHAR: The Federation of European Pharmacological Societies. Co-Chair and Speaker for symposium sponsored by the Italian Society of Pharmacology on "The pharmacological modulation of adult neural stem/progenitor cells". Granada, Spain
- 91) 09/12 Pfizer Pharmaceuticals, Psychiatric and Behavioral Disorders Group, Cambridge, MA
- 91) 10/12 <u>Annual Meeting of The Society of Neuroscience</u>, Clinical Neuroscience Social speaker. New Orleans, LA
- 92) 10/12 <u>Annual Meeting of The Society of Neuroscience</u>, invitation-only information exchange between grantees from National Institute on Drug Abuse (NIDA) and representatives of the Institut National de la

- Santé et de la Recherche Medicale (INSERM), New Orleans, LA
- 93) 04/13 Meeting of <u>The International Society for Neurochemistry</u> and <u>The American Society for Neurochemistry</u>, Speaker for symposium on "Neurogenesis and Neuropsychiatric Diseases", Cancun, Mexico
- 94) 04/13 UT Southwestern Medical Center, Department of Psychiatry, Grand Rounds, Dallas, TX
- 95) 09/13 Annual meeting of the Radiation Research Society, New Orleans, LA
- 96) 10/13 <u>Texas A&M University (TAMU) Institute for Neuroscience (TAMIN) Seminar Series</u>. College Station, TX
- 97) 11/13 <u>Annual meeting of The Society of Neuroscience</u>, Clinical Neuroscience Social speaker. New Orleans, LA
- 98) 11/13 <u>University of Gothenberg</u>, Center for Brain Repair and Rehabilitation, Institute of Neuroscience and Physiology, Gothenberg, Sweden
- 99) 01/14 University of Texas at Dallas, Brain Health Center, BrainHealth Frontiers Lecture Series, Dallas, TX
- 100) 01/14 University of Texas at Dallas, Brain Health Center, Trainee Education Seminar, Dallas, TX
- 101) 02/14 Centre for Cellular and Molecular Biology, Hyderabad, India
- 102) 02/14 Conference on <u>Adult Neurogenesis: From Stem Cells to Therapies Symposium,</u> sponsored by Tata Institute of Fundamental Research, Mumbai, India
- 103) 02/14 National Centre for Biological Sciences (TIFR), Department of Neurobiology, Bangalore, India
- 104) 02/14 NASA, Human Research Program Investigator's Workshop, Session "Central Nervous System Risks", Galveston, TX

Confirmed future presentations:

- 02/14 Keynote speaker for <u>NEURON</u> (North East Undergraduate Research Organization for Neuroscience), <u>Quinnipiac University Medical School</u>, North Haven, CT
- 02/14 Neuroscience Seminar Series speaker, Interdepartmental Neuroscience Program, <u>Yale University</u>, New Haven, CT
- 03/14 University of Rochester, Department of Neurobiology and Anatomy. Rochester, NY
- 03/14 UT Austin, Department of Psychology. Austin, TX
- 04/14 Wesleyan University, Department of Biology, Neuroscience, and Behavior. Middletown, CT
- 05/14 <u>UT San Antonio Health Science Center</u>, Keynote speaker for Center for Biomedical Neuroscience retreat, San Antonio, TX
- 05/14 Cleveland Clinic, Stem Cells and Regenerative Medicine, Lerner Research Institute, Cleveland, OH

UT SOUTHWESTERN SERVICE

Judge, predoctoral Sigma Xi abstract competitions	2002-2010
Judge, Graduate Student Organization and Postdoctoral Association poster sessions	2002-2010
Organizer, "Fourth Academy" medical student event on exercise and the brain	2004
Member , Six-year Planning Committee for 2008-2014 Ph.D. and Postdoctoral Research Training Subcommittee	2005-2009
Organizer and Co-founder of Stem Cells in Neuroscience (SCIN) Workshop group at UT Southwestern. Organizes "works in progress" talks by UT Southwestern	

graduate student and postdoctoral researchers in the field of neural stem cell research.

President of UT Southwestern chapter of <u>Sigma Xi</u>

Honor Society for Scientist/Engineers. Spearheaded and ran the annual graduate student and postdoctoral fellow abstract competition.

Speaker, Medical Science Training Program Women's Luncheon

2006 **Judge**, postdoctoral <u>Sigma Xi</u> abstract competitions

2006-2009

	Eisch, Amelia J.
Speaker, Medical Science Training Program Women's Luncheon	2009
Member , Six-year Planning Committee for 2010-2016 Ph.D. and Postdoctoral Research Training Subcommittee	2009-2011
President Ex-Officio, UT Southwestern chapter of Sigma Xi Honor Society for Scientist/Engineers.	2010-2011
Member , Six-year Planning Committee for 2012-2018 Ph.D. and Postdoctoral Research Training Subcommittee	2011-present
Member , Disability Accommodations Committee Medical, Graduate, and Allied Health Schools	2013-present

SERVICE FOR DEPARTMENT OF PSYCHIATRY, UT SOUTHWESTERN MEDICAL CENTER

Director, Histology, Imaging, and Confocal Microscopy Services Confocal facility for the Department of Psychiatry and UT Southwestern C	2002-2010 Cancer Center
Research and Education Director, Summer Training in Drug Abuse Research Education Training Grant (R25 DA18843; PI: B. Adinoff)	2004-2009
Administrator, Basic Science Training in Drug Abuse Institutional Training Grant, T32 DA7290	2005-2008
Administrator, Basic Science Training in the Neurobiology of Mental Illness Institutional Training Grant, T32 MH076690	2005-2008
Principal Investigator, Basic Science Training in Drug Abuse Institutional Training Grant, T32 DA7290	2008-present
Director, Quantitative Morphology Core Offers consultation and services to Department of Psychiatry researchers preparation, immunohisto- and cytochemical staining, and microscopic quantitative Morphology Core	

Member, **Department of Psychiatry Faculty Search Committee**2011-present

MEDICAL AND GRADUATE SCHOOL DIDACTIC AND SMALL GROUP TEACHING

	Libbin, / timbila b
Lecturer, Developmental Neurogenetics, Neuroscience Program (2 lectures) 2008	
Co-Leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Program 2008	
Lecturer, Neurobiology of Drug Addiction, Neuroscience Program (1 lecture) 2009	
Lecturer, Mechanisms of Drugs Action, Cell Regulation Program (4 lectures) 2009	
Neuroscience Program pre-qualifier term paper reader (Cameron Day) 2009	
Lecturer, Developmental Neurogenetics, Neuroscience Program (2 lectures) 2009	
Co-Leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Program 2009	
Lecturer, Mechanisms of Drugs Action, Cell Regulation Program (4 lectures) 2010	
Neuroscience Program pre-qualifier term paper reader (Ginger Becker) 2010	
Lecturer, Developmental Neurogenetics, Neuroscience Program (2 lectures) 2010	
Co-Leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Program 2010	
Lecturer, Mechanisms of Drugs Action, Cell Regulation Program (4 lectures) 2011	
Lecturer, Neurobiology of Drug Addiction, Neuroscience Program (1 lecture) 2011	
Lecturer, Developmental Neurogenetics, Neuroscience Program (2 lectures) 2011	
Faculty participant/leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Programme International Club, Integ. Biology Programme Internatio	gram 2011
Lecturer, Mechanisms of Drugs Action, Cell Regulation Program (4 lectures)	2012
Faculty participant/leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Prog	gram 2012
Lecturer, Neurobiology of Drug Addiction, Neuroscience Program (1 lecture)	2013
Faculty participant/leader, Neurodegeneration/Neuroplasticity Journal Club, Integ. Biology Prog	gram 2013

DISSERTATION COMMITTEES, UT Southwestern Medical Center (chronological order of defense date)

- 1) Philip Wrage, Cell Regulation graduate program. Laboratory of Malu Tansey.
 - <u>Thesis title:</u> Adipose-derived stromal cells contribute to spinal cord repair but are not neural-crest derived stem cells. Defended June 2007.
- 2) Kris Krishnan (MSTP), Neuroscience graduate program. Laboratory of Eric Nestler.
 - <u>Thesis title:</u> Vulnerability and resilience to social defeat: the role of neuroplasticity within the mesolimbic dopamine circuit. Defended May 2008.
- 3) Diana Simmons, Neuroscience graduate program. Laboratory of David Self.
 - Thesis title: Mu opioid receptor involvement in cocaine addiction. Defended February 2009.
- **4) Irene Masiulus Bowen**, Integrative Biology graduate program, Chair of committee. Lab of Joachim Herz. <a href="https://doi.org/10.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jhers.1007/jher
- **5) Sheila Alcantara**, Genetics and Development graduate program. Laboratory of Luis Parada. Thesis title: Neural stem cells in brain tumor development. Defended May 2009.
- 6) **Kristin Tolson**, Integrative Biology graduate program. Laboratory of Andrew Zinn.
 - Thesis title: Postnatal Sim1 Deficiency Causes Hyperphagic Obesity. Defended October 2009.
- 7) Euiseok Kim, Neuroscience graduate program. Laboratory of Jane Johnson.
 - <u>Thesis title:</u> Neurogenesis and Gliogenesis of Ascl1 (Mash1) Expressing Progenitors in the CNS. Defended December 2009.
- 8) Terina N. Martinez, Integrative Biology graduate program. Laboratory of Malu Tansey.
 - <u>Thesis title:</u> Neuroinflammation, TNF, and ceramide-dependent signaling: putative pathways for neurotoxicity in Parkinson's disease. Defended March 2010.
- 9) Ashley Harms, Integrative Biology graduate program. Laboratory of Malu Tansey.
 - <u>Thesis title:</u> The role of Tumor Necrosis Factor (TNF) in microglial activation and progressive degeneration of dopaminergic neurons. Defended March 2010.
- **10) Kerstin Ure**, Integrative Biology graduate program, Chair of committee. Laboratory of Jenny Hsieh. <u>Thesis title:</u> Transcriptional regulation of adult neurogenesis by NRSF1/REST and NeuroD1. Defended October 2010.
- **11) Lori Boies**, Genes and Development graduate program, Chair of committee. Laboratory of Robert Bachoo. <u>Thesis title:</u> Novel astrocyte-specific transgenic mice identify distinct populations of transient amplifying progenitor cells and long-lived neural stem cells in the subgranular zone of the adult mouse brain. Defended November 2010.
- **12) Timothy Catchpole**, Genetics and Development graduate program. Laboratory of Mark Henkemeyer. Thesis title: Eph-B and Ephrin-B signaling in migration and proliferation of stem cells.

Defended December 2010.

- **13) Katie Seamans**, Neuroscience graduate program. Laboratory of Matthew Goldberg.
 - <u>Thesis title:</u> Behavioral, Neurochemical, and Histological Characterization of Mice Deficient for Parkin, DJ-1, and Antioxidant Proteins. Defended April 2011. (Was committee member until 12/2010).
- **14) Michael Edward Haws (MSTP)**, Neuroscience graduate program, committee Chair. Lab of Craig Powell. <a href="https://doi.org/10.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jns.1001/jn
- **15) Alan Lesslyong**, Neuroscience graduate program. Laboratory of Carol Tamminga. On academic leave.
- **16) Marian Marvin**, Neuroscience graduate program. Laboratory of Matt Goldberg. On academic leave.
- **17) Angie Lin (MSTP)**, Integrative Biology graduate program, Chair of committee. Laboratory of David Russell. Received MS 8/2010.
- 18) Matthew Cummings, Integrative Biology graduate program. Laboratory of Todd Eager. <u>Thesis title:</u> Therapeutic modulation of experimental autoimmune encephalomyelitis by gamma secretase inhibition. Defense date: December 12, 2013.
- **19) Charles Taylor**, Neuroscience graduate program, Chair of committee. Laboratory of Matt Goldberg. Returned to medical school program with intent to defend MS in 2014.
- **20) Angela Walker**, Neuroscience graduate program. Chair of committee. Laboratory of Jeff Zigman. Expected defense: Spring 2014.
- **21) Jessica Perez**, Neuroscience graduate program. Laboratory of Carol Tamminga.
- **22) Meghan Hennis**, Neuroscience graduate program. Laboratory of Matt Goldberg.

 <u>Thesis title:</u> Surprising behavioral and neurochemical enhancements in mice with combined mutations linked to Parkinson's disease. Defended November 20, 2013.
- 23) Rebecca Brulet, Neuroscience graduate program. Laboratory of Jenny Hsieh.
- 24) Daniel (D.J.) Araujo, Neuroscience graduate program. Laboratory of Genevieve Konopka.
- **25) Courtney Lane (MSTP)**, Neuroscience graduate program. Laboratory of Joachim Herz.
- **26) Hillary Cansler,** Neuroscience graduate program. Laboratory of Julian Meeks.
- 27) Cindy Wang, Genetics and Development graduate program. Laboratory of Jiang Wu.

DISSERTATION COMMITTEE/EXTERNAL EXAMINER, other institutions (chronological order of defense date)

- **1) Gloria Mak**, Laboratory of Sam Weiss, Hotchkiss Brain Institute, University of Calgary, Calgary, Canada. Thesis topic: Social interactions and adult neurogenesis. Defended November 17, 2009.
- **2) Maithe Arruda Carvalho**, Laboratory of Paul Frankland, University of Toronto, Toronto, Canada. <a href="https://doi.org/10.108/j.com/neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neurons-neuro
- 3) Martina Boström, Laboratory of Klas Blomgren, University of Gothenburg, Gothenburg, Sweden. <u>Thesis topic</u>: Influence of early life irradiation on hippocampal neurogenesis. Defended November 29, 2013.
- **4) Steven Arriaga,** Laboratory of Brian Derrick, University of Texas San Antonio, TX, USA. Thesis topic: Vestibular loss and adult hippocampal neurogenesis.

GRADUATE STUDENT QUALIFYING EXAMINATION COMMITTEES (chronological order)

- **1) Eric Johnson**, Integrative Biology graduate program. Spring 2003.
- 2) Rich Trinko, Neuroscience graduate program. Spring 2004.
- 3) Denise Ramirez, Integrative Biology graduate program. Spring 2005.
- 4) Inik Chang, Integrative Biology graduate program. Spring 2006.
- **5) Terina Martinez**, Integrative Biology graduate program. Spring 2007.
- 6) Ashley Harms, Integrative Biology graduate program. Spring 2008.
- 7) Angie Lin, Integrative Biology graduate program. Spring 2009.
- 8) Rachel Arey, Neuroscience graduate program. Spring 2009.
- 9) Yi Xu, Integrative Biology graduate program. Spring 2010.
- 10) Juegi Chen, Integrative Biology graduate program. Spring 2011.
- 11) Daniel Epstein, Neuroscience graduate program. Spring 2011. Chair of committee.
- **12) Katelyn Finch**, Integrative Biology graduate program. Spring 2012.
- **13)** Lauren Luethy, Neuroscience graduate program. Spring 2012. Chair of committee.

- 14) Stephanie Lepp, Neuroscience graduate program. Fall 2012.
- **13) Ivan Lee**, Integrative Biology graduate program. Spring 2013. Chair of committee.
- 14) Andrew Eugene Sohn, Neuroscience graduate program. Fall 2013.
- 15) Alexandra Willcockson, Integrative Biology graduate program. Spring 2014.

GRADUATE STUDENTS ROTATING IN EISCH LABORATORY (chronological order)

- 1) Ozgur Karakazu, Winter 2003.
- 2) Michael Donovan, Spring 2003.
- 3) Ed Hurlock, Summer 2003.
- 4) Euiseok Kim, Fall 2003.
- 5) Denise Ramirez, Fall 2003.
- 6) Deanna Wallace-Black, Winter 2004.
- 7) Charcacia Sanders, Spring 2004.
- 8) Michele Noonan (Maiden name: Ostrogonacz), Summer 2004.
- 9) Amy Arguello, Fall 2004.
- 10) Nathan DeCarolis, Summer 2005.
- 11) Phuong Tran, Fall 2005.
- **12) Anita Autry**, Fall 2005.
- 13) Terina Martinez, Winter 2005.
- 14) James Sullivan, Winter 2005.
- 15) Colleen Dewey, Spring 2006.
- 16) Kerstin Ure, Spring 2006.
- 17) Alan Lesselyong, Spring 2007.
- 18) Michael Robichaux, Summer 2008.
- 19) Shamsideen Ojelade, first Fall rotation 2008.
- **20) Phillip Rivera**, second Fall rotation 2008.
- 21) Sarah Bulin, second Fall rotation 2008.
- 22) Maria Carreira, first Fall rotation 2009.
- 23) Chris Walz, first Fall rotation 2009.
- **24)** Aparna Sankararaman, second Fall rotation 2009.
- 25) Marilyn Archer, second Fall rotation 2009.
- 26) Angela Walker, Winter rotation 2010.
- 27) Maithili Dalvi, Winter rotation 2010.
- 28) Jared Hooks, first Fall rotation 2010.
- **29) Daniel Araugo**, first Fall rotation 2011.

MEDICAL STUDENT ROTATIONS (chronological order)

- 1) Jessica L. Ables, MS1 rotation, Summer 2004 (later joined MSTP program).
- 2) Nora Edwards, MSTP rotation, Summer 2004.
- 3) Rania Shebaro. MS IV rotation. August-September 2008.
- 4) Mary-Katherin McGovern, MS1 rotation Summer 2010 (co-mentor with Shari Birnbaum).

GRADUATE STUDENT TRAINEES (chronological order of entering laboratory)

1) Michael H. Donovan

Joined Eisch Lab in June 2003.

Earned predoctoral trainee position on NIMH institutional National Research Service Grant (T32 MH076690). Received individual National Research Service Predoctoral Award from NIMH/NIH (F31 MH075457).

Defended dissertation in Neuroscience Program in March 2008.

Title: Regulation of adult hippocampal neurogenesis: Insights from mouse models of dementia and depression.

After defense, Dr. Donovan accepted NIH postdoctoral fellowships in the labs of David Copenhagen and Larry Tecott (both at UCSF).

2) Gwyndolyn C. Harburg

Joined Eisch Lab in June 2004.

Earned predoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290). Defended dissertation in Integrative Biology Program in June 2007.

Title: The impact of opioids and opiates on adult hippocampal neurogenesis.

After defense, Dr. Harburg completed postdoctoral fellowships in stem cell research with Jane Visvader (Walter and Eliza Hall Research Institute, Melbourne, Australia) and Dr. N. Hinck at UC Santa Cruz.

3) Michele A. Noonan (Maiden name: Ostrogonacz)

Joined Eisch Lab in June 2005.

Earned predoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290).

Received individual National Research Service Predoctoral Award from NIDA/NIH (F31 DA021045).

Defended dissertation in Neuroscience Program in December 2008.

Title: The role of adult neurogenesis in cocaine addiction.

After defense, Dr. Noonan took a postdoctoral fellowship in the lab of Linda Hsieh-Wilson (Cal Tech, HHMI).

4) Amy A. Arguello

Joined Eisch Lab in June 2005.

Supported by a four-year predoctoral Diversity Supplement linked to Dr. Eisch's grant entitled "Opiates and adult neurogenesis" (R01 DA016765) from NIH/NIDA.

Defended dissertation in Neuroscience Program in January 2009.

Title: The impact of chronic morphine on adult hippocampal progenitor cells and the neurogenic niche.

After defense, Dr. Arguello accepted a postdoctoral fellowship in the laboratory of Christina Alberini at Mount Sinai School of Medicine, and then a second postdoctoral position with Rita Fuchs at University of North Carolina/University of Washington-Pullman. Submitted a K99/R00 application in 2013.

5) Jessica L. Ables (MSTP student)

Joined Eisch Lab in September 2005.

Earned predoctoral trainee position on NIMH institutional National Research Service Grant (T32 MH076690).

Defended dissertation in Integrative Biology Program in June 2009.

Title: The role of Notch1 in adult hippocampal neurogenesis and function.

After defense, Dr. Ables finished medical school/MD-PhD (at Mount Sinai School of Medicine) and accepted a postdoctoral fellowship in the laboratory of Nathaniel Heintz at The Rockefeller University.

6) Nathan A. DeCarolis

Joined Eisch Lab in March 2006.

Earned predoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290).

Received individual NINDS National Research Service Predoctoral Award (F31 NS064632).

Defended dissertation in Integrative Biology Program March 2010.

Title: Exploring a functional disconnect between nestin-expressing Type-1 cells and adult hippocampal neurogenesis.

After defense, Dr. DeCarolis accepted a postdoctoral fellowship in the laboratory of Theo Palmer at Stanford University.

7) Sarah E. Bulin

Joined Eisch Lab in January 2009.

Passed qualifying exams in the Neuroscience Program in Spring 2010.

Submitted an individual National Research Service Predoctoral Award application to NIDA entitled <u>Morphine and</u> adult neurogenesis which received a score of 32.

Earned predoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290, October 1 2012 - present).

8) Phillip D. Rivera

Joined Eisch Lab in January 2009.

Passed qualifying exams in the Integrative Biology Program in July 2011.

Supported by a four-year predoctoral Diversity Supplement linked to Dr. Eisch's grant entitled "Opiates and adult neurogenesis" (R01 DA016765) from NIH/NIDA beginning 5/15/10.

Earned predoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA 007290, beginning January 1 2014).

9) Ashley Harms

Defended Ph.D. in Integrative Biology from UT Southwestern March 2010 (lab of Malu Tansey).

Joined Eisch laboratory for a short time (March-May 2010) while waiting for the start of her postdoctoral fellowship in the laboratory of David Standeart at University of Alabama, Birmingham.

10) Aparna Sankararaman

Joined Eisch Lab in April 2010.

Passed qualifying exams in the Integrative Biology Program in Spring 2011.

Dismissed from laboratory and UT Southwestern Graduate Program in May 2012 for scientific misconduct and academic dishonesty. Inquiries about this incident can be addressed to Dr. Eisch, Dr. Yi Liu (head of Integrative Biology Graduate Program), and/or the UT Southwestern Office of the Dean.

POSTGRADUATE EDUCATION (chronological order)

Lecturer, "Advanced Neuroscience" for PGYIII and PGYIV <u>Psychiatry Residents</u>
Gave ~5-7 lectures/yr

2000-2003

Course co-director, "Advanced Neuroscience" for PGYIII and PGYIV <u>Psychiatry Residents</u>
Coordinated lectures and presented 5-7 lectures/yr 2003-2007

Lecturer, "Advanced Neuroscience" for PGYIII and PGYIV <u>Psychiatry Residents</u>

Gave ~2 lectures/yr

2008-2009

POSTDOCTORAL TRAINEES (chronological order of entering laboratory)

1) Chitra D. Mandyam, Ph.D.

Received Ph.D. in Pharmacology from University of Houston in 2002.

Was postdoctoral fellow from February 2001 to June 2004.

Earned individual National Research Service Postdoctoral Award from NIDA (F32 DA018017).

In July 2004, earned an Assistant Professor position at the Scripps Research Institute, San Diego, CA.

Has received multiple K/R grants from NIH to support her independent laboratory.

2) Diane C. Lagace, Ph.D.

Received Ph.D. in Pharmacology from Dalhouise University, Nova Scotia, Canada in July 2004.

Was postdoctoral fellow from September 2004 to January 2008.

Earned individual postdoctoral research fellowship from Canadian Institute for Health Research (3 year grant).

In February 2008, was promoted to Instructor at UT Southwestern Medical Center and received an independent Young Investigator Award from the National Alliance for Research on Schizophrenia and Depression (2 year grant).

In January 2009, Dr. Lagace established her independent laboratory at the University of Ottawa/Ottawa Health Research Institute. Has received multiple competitive grants from the Canadian government to support her independent laboratory (NSERC, CIHR).

3) Stephanie J. Fisher, Ph.D.

Received Ph.D. in Neuroscience from Mayo Clinic Graduate School, Rochester, MN in May 2002.

Was postdoctoral fellow from June 2005 to May 2007.

Earned postdoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290).

In June 2007, Dr. Fischer took a position leading 9th grade science and AP biology at the Booker T. Washington Creative Arts Magnet High School in the Dallas Independent School District.

4) Amit Pradhan, M.D.

UT Southwestern Psychiatry PGYII Resident, Research-Track.

Rotated in laboratory in Fall, 2007.

5) Madeleine A. Johnson, Ph.D.

Received Ph.D. in Neuroscience from Columbia University, NY, NY in May 2008.

Was postdoctoral fellow from June 2008 to 2010.

Earned postdoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290). In 2010, received a merit-based scholarship to attend NYU School of Science Journalism.

6) Neal R. Melvin, Ph.D.

Received Ph.D. in Neuroscience from University of Lethbridge, Alberta, Canada in August 2008.

Was postdoctoral fellow from November 2008 to July 2010.

Earned individual postdoctoral research fellowship from Alberta Heritage Medical Foundation.

In August 2010, accepted an Assistant Professorship at Quest University in Canada.

7) David Petrik, Ph.D.

Received Ph.D. in Neuroscience from UT Health Science Center at San Antonio in July 2008.

Was postdoctoral fellow from November 2008 through February 2013.

In March 2013, joined the laboratory of Dr. Magdalena Götz, Helmholtz, Munich, Germany

8) Irene Masiulus Bowen, Ph.D.

Received Ph.D. in Integrative Biology from UT Southwestern in Spring 2009 (lab of Joachim Herz).

Was postdoctoral fellow from January 2010 to May 2012.

Earned postdoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290).

In 2012, was selected to be <u>Manager of Quantitative Morphology Core</u>, Department of Psychiatry, UT Southwestern Medical Center.

8) Sanghee Yun, Ph.D.

Received Ph.D. from University of Utah in Neurobiology and Anatomy in December 2009 (lab of Ed Levine). Postdoctoral fellow from February 2011 – present.

Earned postdoctoral trainee position on NIMH institutional National Research Service Grant (T32 MH076690, July 1 2013 – present).

9) Sarah Latchney, Ph.D.

Received Ph.D. in Environmental Toxicology, University of Rochester in November 2011 (lab of Lisa Opanashuk). Postdoctoral fellow from March 2012 – present.

Supported by a 1.5-year postdoctoral Diversity Supplement linked to Dr. Eisch's grant entitled "Opiates and adult neurogenesis" (R01 DA016765) from NIH/NIDA beginning 9/15/12.

Earned postdoctoral trainee position on NIDA institutional National Research Service Grant (T32 DA007290, beginning February 1 2014).

UNDERGRADUATE RESEARCHERS (in chronological order)

College attended and special honors or fellowships achieved for work is also noted.

- 1) Ryan Simonak (Rice University) Summer 2001 & 2002. Stanley Summer Scholar.
- 2) Lina Seikh (UT Austin) Summer 2003. Summer Undergraduate Research Fellow (SURF).
- 3) Amy Mahan (Trinity College) Summer 2005 (SURF).
- 4) Ricky Markus (UT Austin) Summer 2005. Summer Training in Drug Abuse Research (S-TDAR).
- **5) Stephen Bell** (UT Dallas) Winter 2006 (UT Dallas Green Fellow). Opted not to complete program. For details of departure, contact Dr. Eisch or Dr. Nancy Street, Director of the UTSW SURF program.
- 6) David Pyle (Texas A&M) Summer 2006 (QP-SURF).
- 7) Josh Schonborn (Oberlin College) Summer 2006 & 2007 (S-TDAR fellow).
- 8) Dante Gonzalez (St. Mary's University) Summer 2007 (SURF).
- 9) Greg Wallingford (Notre Dame University) Summer 2007.
- 10) Jae Kwak (University of Michigan) Summer 2008, Summer 2011.
- 11) Moushumi Dey (Weslyan) Summer 2008 (SURF).
- **12) Ramya Raghavan** (Austin College). Summer 2009 (SURF), Winter Independent Study 2010 (for credit at Austin College), Summer 2010 (SURF), throughout 2010-2011 school year for Austin College Capstone project.
- **13) Tahmina Mahmood** (UT Dallas). Summer 2009 and volunteered throughout 2009-2010 academic year.
- **14) Adam Carlton** (Cornell University, UT Dallas). Summer 2010 (supported by NIDA Diversity Supplement from Eisch Opiate R01), and throughout the 2010-2012 school years.
- **15) Sohail Kamrudin** (U Michigan). Summer 2010, Summer 2011.
- 16) Monica Tamil (UT Dallas) Winter-Spring 2011 (UT Dallas Green Fellow).
- 17) Rachel Redfield (University of Maryland) Fall 2011.
- 18) Alanna Just (Quest University) Summer 2012 (SURF).

- 19) Michael He (Rice University) Summer 2013.
- 20) Emily Fernandez Garcia (University of Puerto Rico) Summer 2013 (SURF).
- **21) Bianca Siegel** (Tulane University) Summer 2013 (SURF). Opted not to complete the 8-week program. For details of departure, contact Dr. Eisch or Dr. Nancy Street, Director of the UTSW SURF program.
- 22) Ryan Reynolds (UT Dallas) Spring 2014 (UT Dallas Green Fellow).

HIGH SCHOOL RESEARCHERS (in chronological order)

Special high school programs attended and special honors or fellowships achieved for work is also noted.

- **1) Jessica Yee** (Texas Academy of Math and Science student, or TAMS) Summer 2003 & 2004. Stanley Summer Scholar.
- 2) Emily Hsu (TAMS student) Summer 2004. Semi-finalist, Siemens Westinghouse Competition.
- 3) Sean Yue (TAMS student) Summer 2005. Semi-finalist, Siemens Westinghouse Competition.
- 4) Santhra Sebastian (TAMS student) Summer 2005.
- 5) Monica Lu (TAMS student) Summer 2005. Semi-finalist, Siemens Westinghouse Competition
- 6) Santhra Sebastian (TAMS student) Summer 2005.
- 7) Stephanie Rogan (Highland Park High School) Summer 2006 & 2007.
- 8) Angel Cook (DISD) Summer 2007. Student/Teacher Access to Resources at Southwestern (STARS).
- 9) Jason Wang (TAMS) Summer 2007. TAMS summer scholarship.
- 10) Lurit Bepo (TAMS) Summer 2007.
- 11) Amina Igeh (TAMS) Summer 2007.
- 12) Chandana Ravikumar (TAMS) Summer 2007.
- 13) Arathi Ramamurthi (TAMS) Summer 2007.
- 14) Harry Han (TAMS) Summer 2008. S-TDAR fellow.
- 15) Ramneek Manchanda (Carrollton High School) Summer 2008.
- 16) Allison Quast (TAMS) Summer 2008.
- 17) Xiafei Ye (TAMS). Summer 2008.
- **18) Ramya Raghavan** (TAMS). Summer 2008. TAMS summer scholarship.
- 19) Adam Carlton (Richardson High School). Winter 2008, Summer 2009.
- 20) Jim Chen (TAMS) Summer 2009. TAMS summer scholarship.
- 21) Sohail Kamrudin (TAMS). Summer 2009.
- **22) Erika Clark** (TAMS). Summer 2010, Summer 2011 (as SURF student). SURF position generously supported by grant from Texas Initiative "Mechanisms of Disease and Translational Science" grant, PI Helen Yin, Ph.D.
- 23) Crystal Chen (Richardson High School). Summer 2010, Summer 2011.
- 24) Avanika Khanna (TAMS). Summer 2010.
- 25) Junho Ahn (TAMS). Summer 2011.
- **26) Ashesh Trivedi** (Carroll Medical Academy). Summer 2012.

VISITING/SABBATICAL RESEARCHERS

Spring 2008: **Jannon Fuchs, Ph.D.** Professor, Department of Biological Sciences, University of North Texas. Spring 2012: **Andrew Naylor, Ph.D.** Researcher, University of Gothenburg, Sweden.

October 2012-March 2014: **Naoki Ito, Ph.D.** Assistant Professor, Kitasato University, Tokyo, Japan.